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EXAMINER				
DUFFIELD, JEREMY S				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/705,831

**Applicant(s)**

KOH ET AL.

**Examiner**

JEREMY DUFFIELD

**Art Unit**

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 10-13, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 6, 9, 14 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7, 8, 10-13, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the ATSC Data Broadcast Standard (A/90) in view of the ATSC Data Application Reference Model (A/94).

Regarding claim 1, A/90 teaches a method of transmitting module information, representing application resources, in a DASE data broadcasting system using a data carousel protocol, the method comprising:

inserting shared information into a DownloadServerInitiate (DSI) message that provides information regarding a module group, i.e. the GroupInfoByte and GroupId reference the transaction id of a DII (Fig. 7.1; Page 22, lines 7-23; Page 28; Table 7.5, 7.6),

the module group having a predetermined number of modules (Fig. 7.1; Page 22, lines 7-23; Page 28; Table 7.5, 7.6) and

the information being shared by a plurality of modules belonging to the module group, i.e. groups can share modules and both contain a copy of the transaction id (Fig. 7.1; Page 22, lines 7-23; Page 28; Table 7.5, 7.6); and

inserting remaining information, excluding the shared information, into a DownloadInfoIndication (DII) message that provides the module information, i.e. ModuleInfoByte, ModuleId, etc. (Fig. 7.1; Page 22, lines 7-23; Table 7.7, 7.8).

A/90 does not clearly teach inserting URI information into a DSI; and inserting URI information into a DII.

A/94 teaches inserting URI information into a DSI, i.e. relative URI (Page 20, line 36-Page 21, line 10; Page 21, lines 25-34; Page 30, line 40-Page 31, line 4; Table 9.6); and

inserting URI information into a DII, i.e. another relative URI that when combined with the DSI relative URI creates an absolute URI and provides the location of the data (Page 20, line 36-Page 21, line 10; Page 21, lines 25-34; Page 30, line 40-Page 31; Table 9.6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify A/90 to include inserting shared URI information into a DSI; and inserting remaining URI information into a DII, as taught by A/94, for the purpose of improving the capabilities of a data carousel to

distribute data to a receiver by providing the receiver with more addressing and identification data.

Regarding claim 2, A/90 in view of A/94 teaches the shared URI information is inserted as a descriptor into a field GroupInfoByte of a structure GroupInfoIndication () in the DSI message (A/90-Fig. 7.1; Table 7.5, 7.6; A/94-Page 20, line 36-Page 21, line 10; Page 21, lines 25-34; Page 30, line 40-Page 31, line 4; Table 9.5, 9.6).

Note: The GroupInfoByte is defined as having a list of descriptors that describe the characteristics of and links to a Data Module Group. Therefore, one of ordinary skill in the art at the time the invention was made would have known to insert the shared URI information as a descriptor into a field GroupInfoByte of a structure GroupInfoIndication () in the DSI message, for the purpose of improving the capabilities of a data carousel to distribute data to a receiver by providing the receiver with more addressing and identification data using an existing field in a known protocol.

Regarding claim 3, A/90 in view of A/94 teaches the remaining URI information is inserted as a descriptor into a structure descriptor () of the DII message, i.e. a relative URI descriptor is inserted in the DII (A/90-Fig. 7.1; Table 7.7, 7.8; A/94-Page 20, line 36-Page 21, line 10; Page 21, lines 25-34; Page 30, line 40-Page 31, line 4; Table 9.5, 9.6).

Regarding claim 4, A/90 teaches a method of transmitting module information, representing application resources, in a DASE data broadcasting system using a data carousel protocol, the method comprising:

inserting shared information into DSI message that provides information regarding a module group, i.e. the GroupInfoByte and GroupId reference the transaction id of a DII (Fig. 7.1; Page 22, lines 7-23; Page 28; Table 7.5, 7.6),

the module group having a predetermined number of modules (Fig. 7.1; Page 22, lines 7-23; Page 28; Table 7.5, 7.6) and

the information being shared by a plurality of modules belonging to the module group, i.e. groups can share modules and both contain a copy of the transaction id (Fig. 7.1; Page 22, lines 7-23; Page 28; Table 7.5, 7.6); and

inserting other information, different from the shared information, into a DownloadInfoIndication (DII) message that provides the module information, i.e. ModuleInfoByte, ModuleId, etc. (Fig. 7.1; Page 22, lines 7-23; Table 7.7, 7.8).

A/90 does not clearly teach inserting content-type information into a DSI; and inserting content-type information into a DII.

A/94 teaches inserting content-type information into a DSI (Page 21, lines 25-34; Page 30, line 40-Page 31, line 14; Table 7.1, 9.6, E.2); and

inserting content-type information into a DII (Page 21, lines 25-34; Page 30, line 40-Page 31, line 14; Table 7.1, 9.6, E.2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify A/90 to include inserting shared content-type information into a DSI; and inserting other content-type information into a DII, as taught by A/94, for the purpose of improving the capabilities of a data carousel to distribute data to a receiver by providing the receiver with more addressing and identification data.

Regarding claim 5, A/90 in view A/94 teaches during insertion of the other content-type information, only the other content-type information regarding modules, which is not shared by the modules belonging to the module group, is included in the DII message, i.e. the shared content-type information is included in the DSI message (A/90-Fig. 7.1; Page 22, lines 7-23; Table 7.7, 7.8; A/94-Page 21, lines 25-34; Page 30, line 40-Page 31, line 14; Table 7.1, 9.6, E.2).

Regarding claim 7, A/90 in view of A/94 teaches the shared content-type information is inserted as a descriptor into a field GroupInfoByte of a structure GroupInfoIndication () in the DSI message (A/90-Fig. 7.1; Table 7.5, 7.6; A/94-Page 20, line 36-Page 21, line 10; Page 21, lines 25-34; Page 30, line 40-Page 31, line 4; Table 9.5, 9.6).

Note: The GroupInfoByte is defined as having a list of descriptors that describe the characteristics of and links to a Data Module Group. Therefore, one of ordinary skill in the art at the time the invention was made would have known

to insert the shared content-type information as a descriptor into a field GroupInfoByte of a structure GroupInfoIndication () in the DSI message, for the purpose of improving the capabilities of a data carousel to distribute data to a receiver by providing the receiver with more addressing and identification data using an existing field in a known protocol.

Regarding claim 8, A/90 in view of A/94 teaches the other content-type information is inserted as a descriptor into a structure descriptor () of the DII message (A/94-Page 21, lines 25-34; Page 30, line 40-Page 31, line 14; Table 7.1, 9.6, E.2).

Regarding claim 10, claim is analyzed with respect to claim 1.

Regarding claim 11, claim is analyzed with respect to claim 2.

Regarding claim 12, claim is analyzed with respect to claim 3.

Regarding claim 13, claim is analyzed with respect to claim 4.

Regarding claim 15, claim is analyzed with respect to claim 7.

Regarding claim 16, claim is analyzed with respect to claim 8.



***Allowable Subject Matter***

4. Claims 6, 9, 14, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 6, A/90 in view of A/94 teaches all elements of claim 4.

A/90 in view of A/94 does not clearly teach the shared content-type information corresponds to a content-type that is most frequently shared by the modules of the module group.

Regarding claim 9, A/90 in view of A/94 teaches all elements of claim 4.

A/90 in view of A/94 does not clearly teach a structure descriptor () of the DII message, for each module of the module group that shares the shared content-type information, is left blank.

Regarding claim 14, A/90 in view of A/94 teaches all elements of claim 13.

A/90 in view of A/94 does not clearly teach the shared content-type information corresponds to a content-type that is most frequently shared by the modules of a module group.

Regarding claim 17, A/90 in view of A/94 teaches all elements of claim 13.

A/90 in view of A/94 does not clearly teach a structure descriptor () of the DII message, for each module of the module group that shares the shared content-type information, is left blank.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEREMY DUFFIELD whose telephone number is (571)270-1643. The examiner can normally be reached on Mon.-Thurs. 8:00 A.M.-5:30 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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30 September 2008  
JSD

/Scott Beliveau/  
Supervisory Patent Examiner, Art Unit 2623